



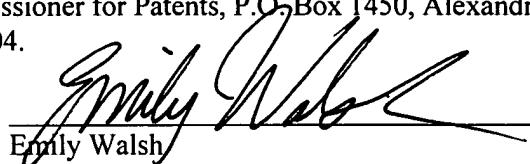
PATENT  
Attorney Docket No. ASC-058A

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S): Leitz *et al.*  
SERIAL NO.: 10/647,074 GROUP NO.: 2812  
FILING DATE: August 22, 2003 EXAMINER: Not Yet Assigned  
TITLE: Semiconductor Heterostructures and Related Methods

**CERTIFICATE OF FIRST CLASS MAILING UNDER 37 C.F.R. 1.8**

I hereby certify that this correspondence, and any document(s) referred to as enclosed herein, is/are being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 13<sup>th</sup> day of January, 2004.

  
Emily Walsh

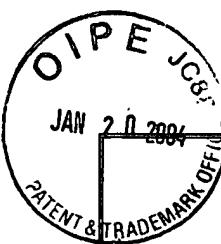
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith are:

1. Transmittal Form (1 pg.);
2. Supplemental Information Disclosure Statement (1 pg.);
3. Form PTO-1449 (1 pg.);
4. copies of cited references B49-B51 and C132-C135;
5. return receipt postcard; and
6. this Certificate of First Class Mailing (1 pg.).

3003700



# TRANSMITTAL FORM

	Application Serial Number	10/647,074
	Filing Date	August 22, 2003
	First Named Inventor	Leitz
	Group Art Unit	2812
	Examiner Name	Not Yet Assigned
	Attorney Docket No.	ASC-058A
	Patent No.	Not Applicable
	Issue Date	Not Applicable

## ENCLOSURES (check all that apply)

<input type="checkbox"/> Fee Transmittal Form <ul style="list-style-type: none"> <li><input type="checkbox"/> Check Attached</li> <li><input type="checkbox"/> Copy of Fee Transmittal Form</li> </ul>	<input type="checkbox"/> Copy of Notice to File Missing Parts of Application	<input type="checkbox"/> Notice of Appeal to Board of Patent Appeals and Interferences
<input type="checkbox"/> Amendment/Response <ul style="list-style-type: none"> <li><input type="checkbox"/> Preliminary</li> <li><input type="checkbox"/> After Final</li> <li><input type="checkbox"/> Affidavits/declaration(s)</li> <li><input type="checkbox"/> Letter to Official Draftsperson including Drawings</li> <li>[Total Sheets _____]</li> </ul>	<input type="checkbox"/> Formal Drawing(s)	<input type="checkbox"/> Appeal Brief (in triplicate)
<input type="checkbox"/> Petition for Extension of Time	<input type="checkbox"/> Request For Continued Examination (RCE) Transmittal	<input type="checkbox"/> Status Inquiry
<input checked="" type="checkbox"/> Supplemental Information Disclosure Statement <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Form PTO-1449</li> <li><input checked="" type="checkbox"/> Copies of IDS Citations (B49-B51 and C132-C135)</li> </ul>	<input type="checkbox"/> Power of Attorney (Revocation of Prior Powers)	<input checked="" type="checkbox"/> Return Receipt Postcard
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> Terminal Disclaimer	<input checked="" type="checkbox"/> Certificate of First Class Mailing under 37 C.F.R. 1.8
<input type="checkbox"/> Sequence Listing submission <ul style="list-style-type: none"> <li><input type="checkbox"/> Paper Copy/CD</li> <li><input type="checkbox"/> Computer Readable Copy</li> <li><input type="checkbox"/> Statement verifying identity of above</li> </ul>	<input type="checkbox"/> Executed Declaration and Power of Attorney for Utility or Design Patent Application	<input type="checkbox"/> Certificate of Facsimile Transmission under 37 C.F.R. 1.8
	<input type="checkbox"/> Small Entity Statement	<input type="checkbox"/> Additional Enclosure(s) (please identify below)
	<input type="checkbox"/> CD(s) for large table or computer program	
	<input type="checkbox"/> Amendment After Allowance	
	<input type="checkbox"/> Request for Certificate of Correction <ul style="list-style-type: none"> <li><input type="checkbox"/> Certificate of Correction (in duplicate)</li> </ul>	

## CORRESPONDENCE ADDRESS

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## SIGNATURE BLOCK

Respectfully submitted,

  
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**PATENT**  
Attorney Docket No. ASC-058A

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANTS: Leitz *et al.*

SERIAL NUMBER: 10/647,074 ART UNIT: 2812

FILING DATE: August 22, 2003 EXAMINER: Not Yet Assigned

TITLE: Semiconductor Heterostructures and Related Methods

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

In accordance with the provisions of 37 C.F.R. 1.97 and 1.98, Applicants hereby make of record the patents and publications listed on the accompanying Form PTO-1449, and other information contained herein, for consideration by the Examiner in connection with the examination of the above-identified patent application. In accordance with the U.S. Patent Office's partial waiver of the requirement under 37 C.F.R. 1.98 (a)(2)(i), only copies of the foreign patent documents and non-patent publications are enclosed.

It is respectfully requested that each of the patents and publications listed on the attached Form PTO-1449, and other information contained herein, be made of record in this application.

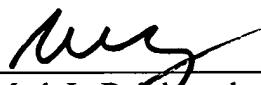
In accordance with the provisions of 37 C.F.R. 1.97, this statement is being filed before the mailing of the first Office action on the merits. Applicants believe no fees are due for this paper to be entered and considered, but the Commissioner is hereby authorized to charge Deposit Account No. 20-0531 for any required fees that may be due.

Respectfully submitted,

Date: January 13, 2004  
Reg. No. 50,773

Tel. No.: (617) 248-7453  
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3003713

  
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<b>FORM PTO - 1449</b> <b>SUPPLEMENTAL INFORMATION</b> <b>DISCLOSURE STATEMENT</b>					<b>ATTORNEY DOCKET NO.: ASC-058A</b> <b>APPLICANTS: Leitz <i>et al.</i></b> <b>SERIAL NO.: 10/647,074</b> <b>FILING DATE: August 22, 2003</b> <b>GROUP: 2812</b>				
<b>U.S. PATENT DOCUMENTS</b>									
EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE		
	A176	5,387,796	02/07/1995	Joshi <i>et al.</i>					
	A177	5,434,102	07/18/1995	Watanabe <i>et al.</i>					
<b>FOREIGN PATENT DOCUMENTS</b>									
EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG (Y/N)
	B49	2-210816	08/22/1990	JP				N	Abstract
	B50	3-36717	02/18/1991	JP				N	Abstract
	B51	61-14116	06/28/1986	JP				N	Abstract
<b>OTHER ART, JOURNAL ARTICLES, ETC.</b>									
EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)								
	C132	Feichtinger <i>et al.</i> , "Misfit Dislocation Nucleation Study in p/p+ Silicon," <u>Journal of the Electrochemical Society</u> , 148 (7) (2001), pp. G379-G382.							
	C133	Grillot <i>et al.</i> , "Acceptor diffusion and segregation in (Al <sub>x</sub> Ga <sub>1-x</sub> ) <sub>0.5</sub> In <sub>0.5</sub> P heterostructures," <u>Journal of Applied Physics</u> , Vol. 91, No. 8 (April 15, 2002), pp. 4891-4899.							
	C134	Hsu <i>et al.</i> , "Surface morphology of related Ge <sub>x</sub> Si <sub>1-x</sub> films," <u>Applied Physics Letters</u> , 61 (11) (September 14, 1992), pp. 1293-1295.							
	C135	"How to Make Silicon," Wacker University, <a href="http://www.wafernet.com/PresWK/h-ptl-as3_wsc_siltronic_com_pages_training_pages_Silic...">http://www.wafernet.com/PresWK/h-ptl-as3_wsc_siltronic_com_pages_training_pages_Silic...</a> , August 28, 2002.							
EXAMINER				DATE CONSIDERED					